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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

UNITED STATES GOVERNMENT

M E M O R A N D U M

DATE: July 20, 1992

REPLY TO

ATTN OF: B. C. "Jay" Jackson, Jr.
Electronics Engineer
Mobile Services Division, CCB

SUBJECT: CC Docket 92-115: Revision of Part 22 of the Commission's rules
governing the Public Mobile Services

TO: Chief, Dockets Branch
Office of the Secretary, OMD

In the Notice of Proposed Rule Making in the subject docket, the Commission proposes rules to govern the assignment of channels in the 928-929 MHz and 952-953 MHz bands (Appendix B, proposed § 22.621 et. seq.). The Office of Engineering and Technology has forwarded to me a copy of a new arrangement with the Department of Communications of Canada concerning these channels.

Attached are three copies of this document. Please insert a copy this document in the original and duplicate docket binders (and RIPS if possible) so that interested members of the public may refer to it when preparing comments or replies (comments due August 21, 1992; replies due September 21, 1992). Thank you.

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Government of Canada
Department of Communications

Gouvernement du Canada
Ministère des Communications

Ottawa, Canada
K1A 0C8

300 Slater Street
Ottawa, Ontario
K1A 0C8

Your file Votre référence

Our file Notre référence

4545-2

JUL 24 1991

Mr. Tom Stanley
Chief Engineer
Federal Communications Commission
2025 M Street
Washington, D.C.
20554

Dear Mr. Stanley:

The Department of Communications (DOC) of Canada and the Federal Communications Commission (FCC) of the United States of America have jointly developed a sharing arrangement for the point-to-multipoint communications systems in the 928-929 MHz and 952-953 MHz bands. This arrangement is based on discussions between representatives from both countries in the DOC/FCC Technical Liaison Committee meetings.

I am forwarding for your consideration this arrangement which we believe will satisfy both countries' spectrum needs in the above mentioned frequency bands. This arrangement would be applied provisionally until the definitive entry into force of a replacement for the *Agreement concerning the coordination and use of radio frequencies above thirty megacycles per second, with annex (Above 30 MHz Agreement)*, as amended.

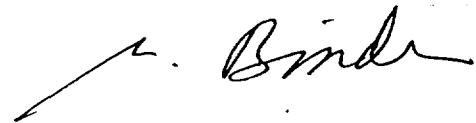
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Canada



Please confirm your acceptance of the enclosed arrangement as an understanding between our two agencies until the revision of the *Above 30 MHz Agreement* can be concluded.

Yours sincerely,



Michael Binder
Assistant Deputy Minister
Research and Spectrum -

Enclosure

Confirmation of Acceptance

The attached *Arrangement Between the Department of Communications of Canada and the Federal Communications Commission of the United States of America Concerning the Use of the Bands 928 to 929 MHz and 952 and 953 MHz Along the United States-Canada Border* is accepted as an understanding between our two agencies. This Arrangement will become effective on September 2, 1991, and is to be applied provisionally until the definitive entry into force of a replacement for the *Agreement concerning the coordination and use of radio frequencies above thirty megacycles per second, with annex*, as amended.



Tom Stanley
Chief Engineer, Office of
Engineering and Technology
Federal Communications Commission



Michael Binder
Assistant Deputy Minister, Research
and Spectrum
Department of Communications

Date: AUG 7 1991

Date: JUL 24 1991

Confirmation of Acceptance

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Tom Stanley
Chief Engineer, Office of
Engineering and Technology
Federal Communications Commission



Michael Binder
Assistant Deputy Minister, Research
and Spectrum
Department of Communications

Date:

AUG 7 1991
1000

Date:

JUL 24 1991

**ARRANGEMENT BETWEEN
THE DEPARTMENT OF COMMUNICATIONS OF CANADA
AND THE FEDERAL COMMUNICATION COMMISSION
OF THE UNITED STATES OF AMERICA
CONCERNING THE USE OF THE BANDS 928 TO 929 MHz
AND
952 TO 953 MHz
ALONG THE UNITED STATES - CANADA BORDER**

1. This arrangement describes the criteria for the coordination and use of the bands 928-929 MHz and 952-953 MHz for point-to-multipoint communications systems in the vicinity of the United-States - Canadian border. The frequencies shall be divided into three separate groups as described below and shared subject to the terms of this arrangement.
2. Use of frequencies within the band 952.8500 to 953.0000 MHz shall not be covered by the terms of this arrangement. Such use shall be governed by the provisions of Arrangement A of the *Agreement concerning the coordination and use of radio frequencies above thirty megacycles per second, with Annex¹*, as amended².
3. Notwithstanding any other provisions of this arrangement, beyond Lines A and B and Lines C and D³, each country shall have full use of the entire 928-929/952-953 MHz bands.
4. Existing stations shall be interpreted, for the purposes of this arrangement, as meaning any station currently licensed and coordinated or grandfathered (as listed in Annex B to this arrangement) or for which a request for coordination is pending before the other administration.

¹ Exchange of notes at Ottawa, October 24, 1962. Entered into force October 24, 1962. USA: *Treaties and Other International Acts Series TIAS 5205 / CAN: Canada Treaty Series (CTS) 1962 No. 15.*

² *Agreement Revising the technical annex to the Agreement of October 24, 1962 (TIAS 5205 / CTS 1962 No. 15).* Effectuated by exchange of notes at Ottawa, June 16 and 24, 1965. Entered into force June 24, 1965. USA: *TIAS 5833 / CAN: CTS 1962 No. 15, as amended June 24, 1965.*

³ See: *Agreement concerning the coordination and use of radio frequencies above thirty megacycles per second, with Annex*, as amended.

5. Between Lines A and B and Lines C and D, the frequencies shall be used as follows, consistent with the technical criteria of Annex A:

928.5000 - 928.7500 MHz and 952.5000 - 952.7500 MHz

Canada has full use of frequencies within these bands (subject to protecting existing, grandfathered stations of the United States). The United States may also use these frequencies on an unprotected basis, provided its stations are limited to a power flux-density (pfd) of -100 dBW/m² at or beyond the Canadian border.

928.2500 - 928.5000 MHz and 952.2500 - 952.5000 MHz

The United States has full use of frequencies within these bands (subject to protecting existing, grandfathered stations of Canada). Canada may also use these frequencies on an unprotected basis, provided its stations are limited to a pfd of -100 dBW/m² at or beyond the United States border.

**928.0000-928.2500, 928.7500-929.0000 MHz
and 952.0000-952.2500 MHz, 952.7500 - 952.8500 MHz**

Frequencies within these bands are available for use by both the United States and Canada on a coordinated, shared basis (subject to protecting grandfathered stations of the other country). Coordination shall be conducted on a first-in-time basis, i.e., based on the date the request was submitted to the other administration. New master⁴ stations must provide a minimum of 145 km (90 miles) separation, or alternatively limit the actual pfd of the proposed station to -100 dBW/m², at existing co-channel⁵ master stations of the other country, or as mutually agreed upon on a case-by-case basis.

Coordination is not required if the pfd at the border is lower than -100 dBW/m². Such stations will be notified to the other administration if protection is required.

⁴ For purposes of this Arrangement, the term "master station" shall be assumed synonymous with "base station" or "control station".

⁵ For purposes of this Arrangement, "co-channel" shall mean any two channels whose occupied bandwidths overlap.

6. Wherever this arrangement provides that a power flux-density may be met in lieu of a distance separation, free space propagation may initially be assumed to determine whether the required power flux-density has been met. If the new applicant fails to meet a required pfd limit using free space propagation, the administration seeking use of the frequency may apply other methods, as appropriate, to demonstrate that the required pfd limit has, in fact, been met. Regardless of the method of analysis used, on channels co-equally shared between the United States and Canada, the actual pfd of the interfering stations must meet the required pfd limit at the locations of existing co-channel master stations. On frequencies primarily assigned for use by the other country, the pfd limit must be met at and anywhere beyond the border.

7. All stations licensed by DOC and FCC in these bands that are listed in Annex B to this arrangement shall be grandfathered and shall be allowed to continue operation under the terms of their existing authorizations. These stations shall be protected from interference from subsequently licensed co-channel stations of the other country. This protection shall consist of limiting the power flux-density of the interfering station to -100 dBW/m² at the protected master station location, or providing a separation distance of 145 km (90 miles) between master stations, or as mutually agreed upon on a case-by-case basis.

ANNEX A

Technical criteria applicable to stations operating in accordance with this arrangement:

Maximum effective isotropically radiated power (EIRP) for master stations in the 952-953 MHz band --- 1000 watts (30 dBW)

Maximum EIRP (or ERP for dipole antennas) --- 50 watts (17 dBW) for fixed remote stations and master stations in the 928-929 MHz band

Maximum EIRP for mobile master stations --- 25 watts (14 dBW)

Maximum antenna height above average terrain for master or control stations --- 500 feet at 1000 watts EIRP, power derated above 500 feet in accordance with the following Table:

Antenna Height Above Average Terrain (ATT)		Maximum Equivalent Isotropic Radiated Power	
Feet	Metres	Watts	dBm
Above 1000	Above 305	200	53
901-1000	275-305	250	54
801- 900	244-274	315	55
701- 800	214-243	400	56
601- 700	183-213	500	57
501- 600	153-182	630	58
500 and below	152 and below	1000	60

Formula used for calculating free space propagation losses:

$pfd \text{ (dBW/m}^2\text{)} = 10 \text{ Log [EIRP/(4}\pi\text{D}^2\text{)]}$; where EIRP in watts, D in metres; and where power is relative to an isotropic radiator

$pfd \text{ (dBW/m}^2\text{)} = 10 \text{ Log * 1.64 [ERP/(4}\pi\text{D}^2\text{)]}$; where ERP in watts, D in metres; and where power is relative to a dipole

ANNEX B

**GRANDFATHERED LIST OF CANADIAN STATIONS
928-929 MHz AND 952-952.85 MHz**

Callsign	Tx Freq	Rx Freq	Location	Lat	Long	Emission	ERP (W)
** 928.0125							
VOR201	928.0125	952.0125	Laval, Que	453429	735006	16K0F2DXN	1.000
VOR202	928.0125	952.0125	Laval, Que	453118	734836	16K0F2DXN	1.000
VOR203	928.0125	952.0125	Laval, Que	453131	734521	16K0F2DXN	1.000
VOR204	928.0125	952.0125	Laval, Que	453519	734300	16K0F2DXN	1.000
VOR205	928.0125	952.0125	Laval, Que	453429	734206	16K0F2DXN	1.000
VOR226	928.0125	952.0125	Laval, Que	453107	734908	16K0F2DXN	0.616
VOR227	928.0125	952.0125	Laval, Que	453320	734051	16K0F2DXN	0.616
VOR228	928.0125	952.0125	Laval, Que	453305	734130	16K0F2DXN	0.616
VOR229	928.0125	952.0125	Laval, Que	453535	734643	16K0F2DXN	0.616
VAF473	928.0125	952.0125	Val d'Or, Que	480712	775448	16K0F2DXN	3.100
** 928.0625							
VOJ201	928.0625	952.0625	St-Hyacinthe, Que	453719	725710	16K0F2DAN	1.000
VOJ202	928.0625	952.0625	St-Hyacinthe, Que	453732	725710	16K0F2DAN	1.000
VOJ203	928.0625	952.0625	St-Hyacinthe, Que	453736	725654	16K0F2DAN	1.000
VOJ204	928.0625	952.0625	St-Hyacinthe, Que	453730	725726	16K0F2DAN	1.000
VOJ205	928.0625	952.0625	St-Hyacinthe, Que	453700	725744	16K0F2DAN	1.000
VOJ206	928.0625	952.0625	St-Hyacinthe, Que	453649	725814	16K0F2DAN	1.000
VOJ207	928.0625	952.0625	St-Hyacinthe, Que	453700	725748	16K0F2DAN	1.000
VOJ208	928.0625	952.0625	St-Hyacinthe, Que	453615	725825	16K0F2DAN	1.000
VOJ209	928.0625	952.0625	St-Hyacinthe, Que	453602	725851	16K0F2DAN	1.000
VOJ210	928.0625	952.0625	St-Hyacinthe, Que	453738	725751	16K0F2DAN	1.000
VOJ211	928.0625	952.0625	St-Hyacinthe, Que	453703	725723	16K0F2DAN	1.000
VOJ212	928.0625	952.0625	St-Hyacinthe, Que	453659	725714	16K0F2DAN	1.000
VOJ213	928.0625	952.0625	St-Hyacinthe, Que	453708	725631	16K0F2DAN	1.000
VOJ214	928.0625	952.0625	St-Hyacinthe, Que	453646	725735	16K0F2DAN	1.000
VOJ215	928.0625	952.0625	St-Hyacinthe, Que	453554	725916	16K0F2DAN	1.000
VOJ216	928.0625	952.0625	St-Hyacinthe, Que	453732	725729	16K0F2DAN	1.000
VOJ217	928.0625	952.0625	St-Hyacinthe, Que	453701	725950	16K0F2DAN	1.000
VOJ218	928.0625	952.0625	St-Hyacinthe, Que	453743	725942	16K0F2DAN	1.000
VOJ219	928.0625	952.0625	St-Hyacinthe, Que	453815	725937	16K0F2DAN	1.000
VOJ220	928.0625	952.0625	St-Hyacinthe, Que	453843	730006	16K0F2DAN	1.000
VOJ221	928.0625	952.0625	St-Hyacinthe, Que	453853	725958	16K0F2DAN	1.000

Callsign	Tx Freq	Rx Freq	Location	Lat	Long	Emission	ERP (W)
VOJ222	928.0625	952.0625	St-Hyacinthe, Que	453755	725718	16K0F2DAN	1.000
VOJ223	928.0625	952.0625	St-Hyacinthe, Que	453804	725706	16K0F2DAN	1.000
VOJ224	928.0625	952.0625	St-Hyacinthe, Que	453754	725639	16K0F2DAN	1.000
VOJ225	928.0625	952.0625	St-Hyacinthe, Que	453825	725736	16K0F2DAN	1.000
VOJ226	928.0625	952.0625	St-Hyacinthe, Que	453756	725732	16K0F2DAN	1.000
VOJ227	928.0625	952.0625	St-Hyacinthe, Que	453804	725807	16K0F2DAN	1.000
VOJ228	928.0625	952.0625	St-Hyacinthe, Que	453804	725758	16K0F2DAN	1.000
VOJ229	928.0625	952.0625	St-Hyacinthe, Que	453836	725835	16K0F2DAN	1.000
VOJ230	928.0625	952.0625	St-Hyacinthe, Que	453855	725725	16K0F2DAN	1.000
VOJ231	928.0625	952.0625	St-Hyacinthe, Que	453840	725843	16K0F2DAN	1.000
VOJ232	928.0625	952.0625	St-Hyacinthe, Que	453750	725851	16K0F2DAN	1.000
VOJ233	928.0625	952.0625	St-Hyacinthe, Que	453750	725905	16K0F2DAN	1.000
VOJ234	928.0625	952.0625	St-Hyacinthe, Que	453752	725637	16K0F2DAN	1.000
VOJ235	928.0625	952.0625	St-Hyacinthe, Que	453736	725635	16K0F2DAN	1.000
VOJ236	928.0625	952.0625	St-Hyacinthe, Que	453728	725638	16K0F2DAN	1.000
VOJ237	928.0625	952.0625	St-Hyacinthe, Que	453704	725607	16K0F2DAN	1.000
VOJ238	928.0625	952.0625	St-Hyacinthe, Que	453648	725802	16K0F2DAN	1.000
VOJ239	928.0625	952.0625	St-Hyacinthe, Que	453729	725752	16K0F2DAN	1.000
VOJ240	928.0625	952.0625	St-Hyacinthe, Que	453709	725832	16K0F2DAN	1.000
VOJ241	928.0625	952.0625	St-Hyacinthe, Que	453719	725758	16K0F2DAN	1.000
VOJ242	928.0625	952.0625	St-Hyacinthe, Que	453749	725720	16K0F2DAN	1.000
VOJ244	928.0625	952.0625	St-Hyacinthe, Que	453750	725626	16K0F2DAN	1.000
VOJ246	928.0625	952.0625	St-Hyacinthe, Que	453720	725608	16K0F2DAN	1.000
VOJ247	928.0625	952.0625	St-Hyacinthe, Que	453812	725813	16K0F2DAN	1.000
VOJ248	928.0625	952.0625	St-Hyacinthe, Que	453714	725621	16K0F2DAN	1.000

** 928.2125

VE9LKQ	928.2125	928.2125	PBL Thunder Bay, Ont	482335	891520	25K0F1DCN	0.200
VE9LKP	928.2125	928.2125	PBL Thunder Bay, Ont	482335	891520	25K0F1DCN	0.200

** 928.4875

XLQ684	928.4875	952.4875	Nepean, Ont	451952	754539	16K0F1DCN	21.000
XLQ683	928.4875	952.4875	Nepean, Ont	452042	754331	16K0F1DCN	21.000
XLQ682	928.4875	952.4875	Nepean, Ont	451928	754937	16K0F1DCN	21.000

** 928.7625

XLB885	928.7625	952.7625	Port Moody, BC	491545	1224900	25K0F3DBN	83.000
XLB888	928.7625	952.7625	Surrey, BC	491207	1225257	25K0F3DBN	83.000
XLB890	928.7625	952.7625	Ioco, BC	491801	1225315	25K0F3DBN	83.000

Callsign	Tx Freq	Rx Freq	Location	Lat	Long	Emission	ERP (W)
XLB886	928.7625	952.7625	Delta, BC	490830	1230153	25K0F3DBN	83.000
XLB892	928.7625	952.7625	Vancouver, BC	491729	1230531	25K0F3DBN	83.000
XLB893	928.7625	952.7625	Richmond, BC	491153	1230725	25K0F3DBN	83.000
XLB891	928.7625	952.7625	Vancouver, BC	491629	1230820	25K0F3DBN	83.000
XLB887	928.7625	952.7625	Vancouver, BC	491224	1230155	25K0F3DBN	83.000
XLB894	928.7625	952.7625	Richmond, BC	491200	1230435	25K0F3DBN	83.000
** 928.8625							
XLB889	928.8625	952.8625	Chilliwack , BC	490834	1215835	25K0F3DBN	83.000
XLB895	928.8625	952.8625	Matsqui, BC	490713	1221755	25K0F3DBN	83.000
** 952.0125							
VOR200	952.0125	928.0125	Laval, Que	453457	734505	16K0F2DXN	1.000
VAF472	952.0125	928.0125	Val d'Or , Que	480600	774630	16K0F2DXN	2.000
** 952.0625							
VOJ200	952.0625	928.0625	St-Hyacinthe, Que	453746	730012	16K0F2DAN	0.955
** 952.4875							
XLQ681	952.4875	928.4875	Nepean, Ont	451628	754455	16K0F1DCN	6.000
** 952.7625							
XLB877	952.7625	928.7625	Mt Seymour, BC	492112	1225710	25K0F3DBN	34.700
** 952.8625							
XLB882	952.8625	928.8625	Sumas Peak, BC	490710	1220747	25K0F3DBN	34.700

GRANDFATHERED LIST OF U.S. STATIONS
928-929 MHz AND 952-952.85 MHz

Callsign/ File	Master	Remote	Location	Lat	Long	Emission	EIRP (dBm)
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**** SEATTLE AREA**

KNKL914	928.9125		Bellevue, WA	473241	1220628	16K0F3E	47.0*
KNKL914	928.99375		Granite Falls, WA	480059	1225131	16K0F3E	47.0*
KNKL914	928.99375		Point Roberts, WA	485622	1230817	16K0F3E	47.0*
759452	952.00625	928.00625	Anacortes, WA	482945	1223310	12K0F9	34.7
WHJ771	952.0375	928.0375	Seattle, WA	473257	1224702	15K0F2D	39.3
WNET680	952.0625	928.0625	Issaquah, WA	473018	1215815	16K0F2D	45.0
WNTF637	952.0875	928.0875	McMicken Heights, WA	472720	1221657	25K0F2D	52.0
WNEN314	952.1125	928.1125	Seattle, WA	473617	1221946	25K0F2D	50.0
WNEX580	952.1375	928.1375	Bremerton, WA	473252	1224653	25K0F3E	52.0
WNEX581	952.1375	928.1375	Bellevue, WA	473231	1220629	25K0F3E	52.0
WNEX582	952.1375	928.1375	Granite Falls, WA	480306	1215137	25K0F3E	52.0
WNET681	952.1625	928.1625	Seattle, WA	473652	1222015	16K0F2D	46.8
WNEN314	952.1875	928.1875	Seattle, WA	473617	1221946	25K0F2D	50.0
WHJ771	952.2375	928.2375	Seattle, WA	473257	1224702	15K0F2D	44.7
WNEU483	952.5625	928.5625	Arlington, WA	481210	1221056	25K0F2D	48.1
WNEO891	952.6375	928.6375	Clearview, WA	475031	1220723	25K0F2D	48.1
WNEV369	952.6625	928.6625	Renton, WA	472804	1221124	25K0F2D	49.9
WNEO890	952.7125	928.7125	Sultan, WA	475732	1214320	25K0F2D	48.1
WNEO892	952.7875	928.7875	Everett, WA	475849	1221151	25K0F2D	48.1

**** IL/ND/MN/WI/N MI AREA**

KOR933	928.9625		Chicago, IL	415714	874237	16K0F3E	47.0*
WNEO948	952.0125	928.0125	Mountain Iron, MN	473350	923815	25K0F2D	30.4
WNEO959	952.0125	928.0125	Havre, MT	482939	1094239	25K0F2D	42.0
WNEP344	952.0375	928.0375	Rudyard, MT	483215	1103501	25K0F2D	34.5
WNTA860	952.05625	928.05625	Mountain Iron, MN	473219	923701	12K0F2D	37.6
WNEP343	952.0625	928.0625	Lothair, MT	482939	1111440	25K0F2D	34.2
WNTB926	952.08125	928.08125	Kalispell, MT	481034	1142053	12K0F2D	44.9
WNEO960	952.0875	928.0875	Shelby, MT	483057	1114947	25K0F2D	33.5
WNEP269	952.1125	928.1125	Cut Bank, MT	483717	1121948	25K0F2D	34.2
WNEP266	952.1375	928.1375	Browning, MT	483203	1130042	25K0F2D	40.6
WNEP267	952.1625	928.1625	East Glacier, MT	482911	1131045	25K0F2D	33.6
WNEP268	952.1875	928.1875	East Glacier, MT	482141	1131730	25K0F2D	33.6
WNEP603	952.2375	928.2375	West Glacier, MT	482600	1135754	25K0F2D	34.1
WHK201	952.5375	928.5375	Duluth, MN	464931	920745	25K0F2D	39.3

Callsign/ File	Master	Remote	Location	Lat	Long	Emission	EIRP (dBm)
WNEY491	952.58125	928.58125	Bates, MI	460540	883639	12K0F3E	46.6
WNES366	952.6375	928.6375	Hibbing, MN	472254	925721	25K0F2D	42.7
WNEY493	952.65625	928.65625	Iron Mountain, MI	455000	880452	12K0F3E	48.0
WNER295	952.6625	928.6625	Grand Forks, ND	480025	970702	25K0F2D	40.9
WNEY492	952.73125	928.73125	Land O Lakes, WI	460945	891256	12K0F3E	48.7
WNEV500	952.7625	928.7625	Thief River Falls, MN	480751	961144	25K0F2D	35.9
WNEQ789	952.8375	928.8375	Duluth, MN	464707	920715	25K0F2D	37.8

** DETROIT AREA

KNKK971	928.8625		Detroit, MI	421945	830225	16K0F3E	47.0*
KNKM550	928.9625		Detroit, MI	421945	830225	16K0F3E	47.0*
KNKI478	928.9875		Detroit, MI	421945	830225	16K0F3E	47.0*
KNKE892	928.9875		Detroit, MI	422828	831653	16K0F3E	47.0*
KNKE892	928.9875		Detroit, MI	422856	831319	16K0F3E	47.0*
WNEX478	952.00625	928.00625	Hillsdale, MI	415436	843701	12K0F2D	38.8
WNEQ781	952.0125	928.0125	Richmond, MI	424832	824832	16K0F2D	44.2
WNEQ225	952.0375	928.0375	Dearborn, MI	421813	831543	15K0F2D	39.3
WHJ425	952.0375	928.0375	Detroit, MI	421945	830225	15K0F2D	45.3
WHJ426	952.0375	928.0375	Detroit, MI	422841	831447	15K0F2D	45.3
WNEQ226	952.0375	928.0375	Saint Clair Shores, MI	422743	825235	15K0F2D	39.3
WNER834	952.0375	928.0375	Troy, MI	423336	830939	15K0F2D	39.3
WNTH886	952.0375	928.0375	Pontiac, MI	423753	831728	25K0F2D	52.0
767084	952.0375	928.0375	Brighton, MI	423300	834134	25K0F3D	52.0
768760	952.0375	928.0375	Stony Creek, MI	415726	831530	25K0F3D	52.0
768761	952.0375	928.0375	Utica, MI	423842	830431	25K0F3D	52.0
768762	952.0375	928.0375	Ann Arbor, MI	421641	834433	25K0F3D	52.0
771240	952.0375	928.0375	Taylor, MI	421156	831415	25K0F3D	52.0
WNTH699	952.05625	928.05625	Turner, MI	440639	844400	12K0F2D	60.0
WNEP295	952.0875	928.0875	Bowling Greene, OH	412221	833830	16K0F2D	25.6
WNEF627	952.1125	928.1125	Oak Park, MI	422822	831159	15K0F2D	48.2
WNEP548	952.1125	928.1125	Toledo, OH	413920	833206	16K0F2D	26.5
WNEX384	952.1375	928.1375	Detroit, MI	421955	830242	25K0F2D	50.0
WNTF311	952.1625	928.1625	Detroit, MI	423336	830939	16K0F2D	37.0
WNTH697	952.18125	928.18125	Detroit, MI	422216	830436	11K0F2D	37.0
WNTH232	952.19375	928.19375	Detroit, MI	421948	830251	12K0F2D	37.0
WNEP548	952.2125	928.2125	Toledo, OH	413920	833206	16K0F2D	26.5
WNEQ225	952.2375	928.2375	Dearborn, MI	421813	831543	15K0F2D	39.3
WHJ425	952.2375	928.2375	Detroit, MI	421945	830225	15K0F2D	45.3
WHJ426	952.2375	928.2375	Detroit, MI	422841	831447	15K0F2D	45.3
WNEQ226	952.2375	928.2375	Saint Clair Shores, MI	422743	825235	15K0F2D	39.3

Callsign/ File	Master	Remote	Location	Lat	Long	Emission	EIRP (dBm)
WNER834	952.2375	928.2375	Troy, MI	423336	830939	15K0F2D	39.3
WNTH886	952.3375	928.3375	Pontiac, MI	423753	831728	25K0F2D	52.0
767084	952.3375	928.3375	Brighton, MI	423300	834134	25K0F3D	52.0
768760	952.3375	928.3375	Stony Creek, MI	415726	831530	25K0F3D	52.0
768761	952.3375	928.3375	Utica, MI	423842	830431	25K0F3D	52.0
768762	952.3375	928.3375	Ann Arbor, MI	421641	834433	25K0F3D	52.0
771240	952.3375	928.3375	Taylor, MI	421156	831415	25K0F3D	52.0
766713	952.50625	928.50625	Macomb, MI	423811	825455	12K0F9W	37.0
WNEQ344	952.5375	928.5375	Clinton, MI	420522	835453	16K0F2D	47.1
WNEQ812	952.5625	928.5625	Detroit, MI	422002	830328	16K0F2D	37.0
WNTB637	952.59375	928.59375	Jackson, MI	420922	842339	12K0F2D	44.7
766817	952.63125	928.63125	Clinton, MI	423531	825701	12K0F9W	37.0
766347	952.65625	928.65625	Davisburg, MI	424627	832938	12K5F1D	42.3
WNEM576	952.6625	928.6625	Defiance, OH	412141	841802	16K0F2D	48.0
WEG842	952.8		Flint, MI	430027	833954	100KF8W	55.8

** CLEVELAND AREA

KNKM639	928.9625		Chesterland, OH	412754	811713	16K0F3E	47.0*
771106	952.0875	928.0875	Elyria, OH	412209	820634	25K0F1W	37.0
WNEP451	952.0125	928.0125	Boston, OH	411547	813649	16K0F2D	43.5
WNEP452	952.0125	928.0125	Broadview Heights, OH	411852	813957	16K0F2D	43.5
WNEP445	952.0125	928.0125	Cleveland, OH	412950	814150	16K0F2D	43.5
WNEP449	952.0125	928.0125	Warrensville Hghts, OH	412648	813020	16K0F2D	43.5
WNEX398	952.1625	928.1625	Parma, OH	412315	814143	25K0F2D	48.5
758007	952.1625	928.1625	Parma, OH	412147	814258	25K0F9W	48.5
WNEP294	952.2125	928.2125	Cleveland, OH	412955	814142	16K0F2D	32.4
769777	952.51875	928.51875	Cleveland, OH	412921	813608	12K5F9W	44.7
WNER841	952.6875	928.6875	Thompson, OH	414138	810302	25K0F2D	43.9

** BUFFALO AREA

KEA777	928.8625		Harris Hill, NY	425750	783813	16K0F3E	47.0*
WNER435	928.8875		Buffalo, NY	425252	785232	16K0F3E	47.0*
WNEH517	952.0375	928.0375	Buffalo, NY	425747	785236	15K0F2D	39.3
WNER434	952.0625	928.0625	Cheektowaga, NY	425652	784000	16K0F2D	48.2
WNEH821	952.0875	928.0875	Buffalo, NY	425247	785237	16K0F2D	41.0
WNEH517	952.2375	928.2375	Buffalo, NY	425747	785236	15K0F2D	39.3
WNER435	959.8875	928.8875	Buffalo, NY	425252	785232	16K0F2D	41.1

Callsign/ File	Master	Remote	Location	Lat	Long	Emission	EIRP (dBm)
** ROCHESTER AREA							
772777	952.0125	928.0125	Batavia, NY	425955	781118	16K0F1D	46.1
WNEN306	952.1625	928.1625	Rochester, NY	430915	773616	16K0F3E	41.0
WNER433	952.2125	928.2125	Fairport, NY	430210	772524	25K0F2D	58.7
WNEO825	952.2375	928.2375	Fairport, NY	430210	772524	25K0F2D	58.3
WNTF238	959.90625	928.90625	Rochester, NY	430650	773717	12K0F2D	43.2
WNER433	959.9375	928.9375	Fairport, NY	430210	772524	16K0F2D	42.2
WNTB519	959.9625	928.9625	Bristol, NY	424445	772532	25K0F2D	47.1
** SYRACUSE AREA							
WNEG673	952.0375	928.0375	Omro, NY	424757	762603	25K0F2D	47.9
WNTG964	952.0625	928.0625	Syracuse, NY	425800	761205	15K0F2D	45.3
WNES461	952.0875	928.0875	Syracuse, NY	430521	760951	16K0F2D	42.0
WNET706	952.8375	928.8375	Clay, NY	430835	761102	16K0F2D	44.0
ONE-WAY REMOTES (POWER DONUTS)							
WNEU844	928.5875		Syracuse, NY	430323	760432	20K0F2D	43.0
WNEU857	928.7875		Clay, NY	431151	761018	20K0F2D	43.0
WNEU844	952.5875		Syracuse, NY	430323	760432	20K0F2D	43.0
WNEU857	952.7875		Clay, NY	431151	761018	20K0F2D	43.0
** VERMONT AREA							
WNER813	952.0125	928.0125	South Barre, VT	440929	722844	25K0F3E	42.0
765690	952.03125	928.03125	Burlington, VT	442829	731140	12K5F9W	46.2
WNER812	952.0625	928.0625	Saint Albans, VT	444823	730254	25K0F3E	33.5
WNTF824	952.08125	928.08125	Sherburne, VT	433823	725010	12K0F2D	53.0
WNES454	952.1375	928.1375	Stowe, VT	443155	724900	25K0F3E	37.0
WNER865	952.1625	928.1625	Westfield, VT	445459	723045	25K0F3E	37.0
WNTI913	959.85625	928.85625	Stannard, VT	443123	721244	12K0F2D	45.2

NOTE: Values annotated with an asterix (*) correspond to an ERP, as opposed to an EIRP.